

**We Claim:**

- Sub B<sup>1</sup> 1) A process for delivering a complex to a cell, comprising:
- forming a compound having a net charge comprising a polyion and a polymer in a solution;
  - adding a charged polymer to the solution in sufficient amount to form the complex having a net charge different from the compound net charge; and,
  - inserting the complex into a mammal.
- 2) The process of claim 1 wherein the charged polymer comprises a polycation.
- Sub B<sup>1</sup> 3) The process of claim 2 wherein the polycation is selected from group consisting of PLL and PEI.
- 4) The process of claim 1 wherein the charged polymer comprises a polyanion.
- Sub B<sup>2</sup> 5) The process of claim 2 wherein the polyanion comprises a molecule selected from the group consisting of succinylated PLL, succinylated PEI, polyglutamic acid, polyaspartic acid, polyacrylic acid, polymethacrylic acid, dextran sulfate, heparin, hyaluronic acid, DNA, RNA, and negatively charged proteins.
- 6) The process of claim 1 wherein the charged polymer comprises a block co-polymer.
- 7) The process of claim 4 wherein the polyanion comprises a molecule selected from the group consisting of pegylated derivatives, pegylated derivatives carrying specific ligands, block copolymers, graft copolymers and hydrophilic polymers.
- Sub B<sup>2</sup> 8) A complex for delivering a polyion to a cell, comprising:
- a polyion; and,
  - a charged polymer wherein the polyion and the charged polymer are bound in complex, the complex having a net charge that is the same as the net charge of the charged polymer.

9) ~~The complex of claim 8 wherein the charged polymer comprises a polycation.~~

Sub B<sup>3</sup> 10) ~~The complex of claim 9 wherein the polycation is selected from group consisting of PLL and PEI.~~

11) ~~The complex of claim 8 wherein the charged polymer comprises a polyanion.~~

Sub B<sup>4</sup> 12) ~~The complex of claim 9 wherein the polyanion comprises a molecule selected from the group consisting of succinylated PLL, succinylated PEI, polyglutamic acid, polyaspartic acid, polyacrylic acid, polymethacrylic acid, dextran sulfate, heparin, hyaluronic acid, DNA, RNA, and negatively charged proteins.~~

13) ~~The complex of claim 8 wherein the charged polymer comprises a block co-polymer.~~

14) ~~The complex of claim 11 wherein the polyanion comprises a molecule selected from the group consisting of pegylated derivatives, pegylated derivatives carrying specific ligands, block copolymers, graft copolymers and hydrophilic polymers.~~

Sub B<sup>4</sup> 15) ~~A drug for delivery to a cell, comprising:~~

- ~~a) a polycation non-covalently attached to a polyanion; complexed with,~~
- ~~b) a negatively charged polyion.~~

16) ~~The complex of claim 15 wherein the polycation is selected from group consisting of PLL and PEI.~~

17) ~~The complex of claim 16 wherein the negatively charged polyion comprises a molecule selected from the group consisting of succinylated PLL, succinylated PEI, polyglutamic acid, polyaspartic acid, polyacrylic acid, polymethacrylic acid, dextran sulfate, heparin, hyaluronic acid, DNA, RNA, and negatively charged proteins.~~

18) The complex of claim 15 wherein the negatively charged polyion comprises a molecule selected from the group consisting of ~~pegylated derivatives~~, pegylated derivatives carrying specific ligands, block copolymers, graft copolymers and hydrophilic polymers.

add B<sup>s</sup> →